ABSTRACT OF THE DISCLOSURE

The gene for Streptococcus pyogenes DNase B has been cloned and vectors incorporating the cloned DNA have been used to transform Escherichia coli, allowing efficient and rapid production of the DNase in E. coli without the necessity of growing large quantities of S. pyogenes. The enzyme can be produced with a leader peptide at its amino terminus. An improved method for the purification of naturally occurring S. pyogenes DNase B enzyme is also provided. The DNase B enzyme produced, either by purification of naturally occurring enzyme or by recombinant DNA techniques, can be used to generate antibodies and can also be used in immunochemical assays to detect the presence of anti-DNase B antibodies in serum as a marker of infection by S. pyogenes.